is granulate, but not quite so densely as in S. venerabilis, and the smooth basal area is much more extended. The elytra are striated in a similar manner, but the interstices are rather more shining than is usual in S. venerabilis, and the punctures scattered over the surface, although small, are very distinct. The margin is bicarinate, the inner carina being complete, and not broken up as in S. venerabilis. The hair on the posterior tibiæ and elsewhere is fulvous. The tarsi are very little longer than the tibial spur.

Hab. Maziwa Mitatu, Taru Desert, March 18th, 1897.

BIBLIOGRAPHICAL NOTICE.

A Memoir of William Pengelly, of Torquay, F.R.S., Geologist, with a Selection from his Correspondence. Edited by his Daughter Hester Pengelly; with a Summary of his Scientific Work, by the Rev. Professor Bonney, F.R.S., F.G.S., Hon. Canon of Manchester. 341 pages, with Portrait and ten other Plates. Svo. John Murray, London.

Born January 12, 1812; died March 16, 1894, aged 82, it may well have been said of him-"Thou shalt come in at thy full time to the grave, as the corn is gathered to the shock at his season." We know the general history of any such grain as is here alluded to, its origin, sowing, growth, and gathering in; but of the special history of a good old man, who has passed through all the stages of a long and useful life with credit to himself and benefit to others, we require to know much from those who were his particular companions and friends. Manifold materials for this view of W. Pengelly's life exist in letters and memoranda collected by his family. These have been freely utilized in the Biography by Miss Hester Pengelly. The narrative, divided into nineteen chapters, marked off by groups of the successive years and personal occurrences, is clear and consistent, often taking in contingent parts of the correspondence and the anecdotes so characteristic of W. Pengelly's conversation. In fact, letters, anecdotes, narrative, and personal remarks are skilfully pieced together. Here and there the reader may find the transition from large to small print, and from abstract to concrete statement of occurrences, doings, and thinkings, rather inconvenient. Nevertheless the record can be taken up at any part with satisfaction; and it is often difficult to lay it down, either on account of its anecdotal clearness or from sympathetic feeling. It is full of interest both for his contemporaries, who had a living friendship with him, and for the later admirers of his powers, and students who have benefitted by his writings.

Accustomed to a seafaring life in his early years, W. Pengelly's

habits and thoughts were influenced as well by its bright, cheerful, and inspiriting aspects as by the darkness and dangers of storms and the hardships of a sailor's work. With trusty companions he weathered the tempests; and his natural gaiety, real good-nature, and high moral principles enabled him to be cheerful and straight amidst rough but well-intentioned comrades. So in after-life, through years of hard work and narrow means, hopefully and persistently he improved his knowledge as schoolmaster, and before long as tutor and lecturer in mathematics and the natural sciences. About 1840 geology attracted his attention, and ever afterwards he assiduensly worked at the rocks and fossils of Cornwall and Devon in sympathy and correspondence with many geologists of note. The geological structure of the country, the fossil fishes of Polperro and elsewhere, the clay-beds and lignites of Bovey Tracey, and especially the varied contents of the Bone-Caves of Happaway Hill, Brixham, and Kent's Hole, excited his scientific energies, using up his leisure and his holidays. The results of his work, complete in itself and trustworthy in its exactitude, gave him a high standing among the intellects of the day. His knowledge was widely sought for and freely imparted. The extensive correspondence with the Author of the 'Principles' and 'Elements of Geology' alone shows what influence Pengelly's experience and philosophic acumen had on the establishment and progress of geological science.

Of Pengelly's geological work and of his various published papers (119 catalogued at pages 323-329), Dr. Bonney's Appendix (pages 291-322) is a complete, critical, and scientifically correct account, written with a deep and affectionate sympathy for the

deceased friend and fellow-worker.

Mr. F. S. Ellis, an old friend and neighbour at Torquay, has written the Preface for the Memoir, with a full knowledge of his deceased friend's life and circumstances. He truly observes:—"It can scarcely fail to force itself on the reader of the ensuing pages that the special note of William Pengelly's character, apart from the energy, perseverance, clear-sightedness, wit, and abundant good humour which distinguished him, was his extraordinary unselfishness."

In many directions during his life Pengelly was in touch with different classes of society, and left incidental notes of their ways and thoughts. These collected records (1812–1894) constitute a not unimportant part of the history of British science, and, indeed, a good chapter of English history, as to the people of various degrees

and conditions, in their intellectual aspect.

His influence for good affected a large circle, both of those who knew him and those who have known his writings. It was a steady light replacing the gloom around it. For the advancement of good and useful knowledge he laboured hard for many years, as the several Institutions and Museums of Devon, Cornwall, and elsewhere can testify, and as the elaborate "Memoir" before us fully shows. Not only of "Men of Might," battling against armed enemies, but

of others, fighting against ignorance and superstition, may it be said—

"Some cherissannee it is to gentle mind,
When they have chevyced their land from bane,
When they are dead, they leave their name behind,
And their good deeds do on the Earth remain."
(Introduction to 'Ella': Chatterton.)

MISCELLANEOUS.

On a new Myxosporidian of the Family Glugeïdæ. By Louis Leger.

The larvæ of Simulium (S. ornatum, Meig.) abound at the commencement of spring in our swift-flowing French streams, and more particularly in those of the mountainous districts of the south. They are to be found in hundreds, placed side by side and attached by the anal region to stones or blades of grass, more especially in

the places where the current is most disturbed.

If these clusters of larvæ be examined with some little attention, one is struck with the very peculiar appearance presented by certain of them, in which the abdominal region is greatly swollen and of a milky-white colour, which offers a sharp contrast to the dusky green tint of the normal individuals. A careful dissection, performed under a lens, shows that these larvæ contain in the body-cavity free parasitic masses each of which forms a kind of sac of an opaque white, with irregular contours. Certain larvæ contain but one of these masses, which fills the greater portion of the body-cavity, and thus attains a length of almost half a centimetre; others exhibit two or three of them-rarely more-which together fill up the vacant spaces of the body-cavity, upon which to some extent they are moulded. Sometimes, in the case of certain greatly diseased larvæ, the parasitic sac, owing to excessive growth, has distended the superficial integuments and causes a hernia on the surface of the larval abdomen in the shape of a large and nearly spherical cyst; but most frequently the parasite in its growth simply compresses the organs of the body-cavity without injuring them in any way. Even the muscles are not injured, and the larvæ, though severely attacked, still exhibit very active movements. The fat-body alone appears excessively reduced and is often wanting, which leads to the belief that it is above all at its expense that the development of the parasite is effected. As for the digestive tract, this appears to be always immune in larvæ manifestly attacked by the parasites. On a single occasion I met with a young Myxosporidian still non-sporulated and forming a hernia on the external surface of the intestine, which shows that the migration of the vegetative stages from the alimentary canal into the colome takes place at a very early period and rapidly.

On being examined under the microscope the parasitic masses appear as sacs with a delicate transparent wall, the interior of